

wherein A is a hydrophobic polysiloxane or perfluoroalkyl polyether segment; B is a surface-modifying hydrophilic segment having a weight average molecular weight of ≥ 100 that is devoid of a crosslinkable group; Q is a moiety comprising at least one crosslinkable ethylenically unsaturated group; (alk) is C_2 - C_{20} -alkylene which is unsubstituted or substituted by hydroxy; L_1 , L_2 and L_3 are each independently of the other a linking group; p_1 and q_1 are each independently of the other an integer from 1 to 12; and either t is 0 and p and q are each independently of the other an integer from 2 to 20; or t is an integer from 1 to 8 and p and q are each 0.

B1

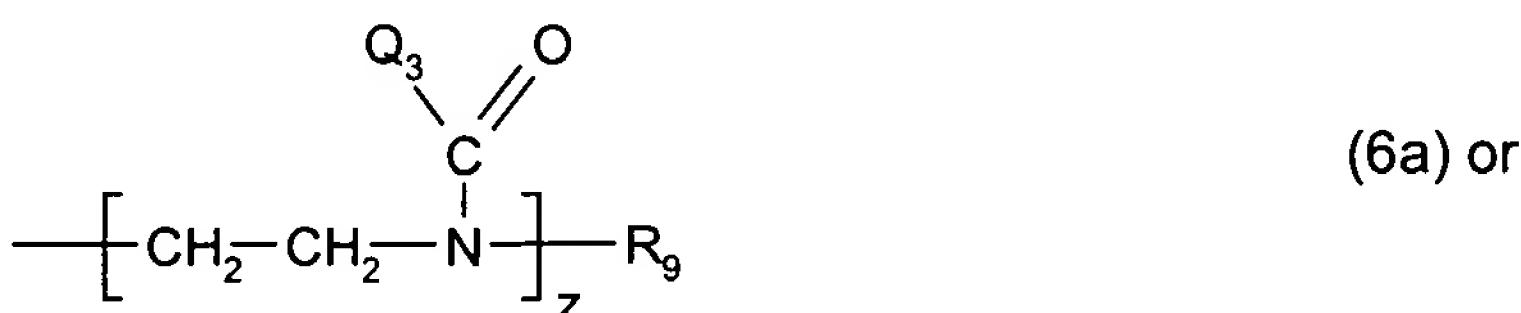
7. (once amended) An amphiphilic block copolymer according to claim 1, wherein B is a non-ionic segment selected from the group consisting of a polyoxyalkylene, polysaccharide, polypeptide, poly(vinylpyrrolidone), polyalkylacrylate, polymethacrylate, polyhydroxyalkylacrylate, polyhydroxymethacrylate, polyacyl alkylene imine, polyacryl amide, polyvinyl alcohol, polyvinyl ether and a polyol, or B is a polyionic segment selected from the group consisting of a polyallylammonium, polyethyleneimine, polyvinylbenzyltrimethylammonium, polyaniline, sulfonated polyaniline, polypyrrole, ~~polypyridine~~, polyacrylic acid, polymethacrylic acid, a polythiophene-acetic acid, a polystyrenesulfonic acid and a zwitterionic segment, or a salt thereof.

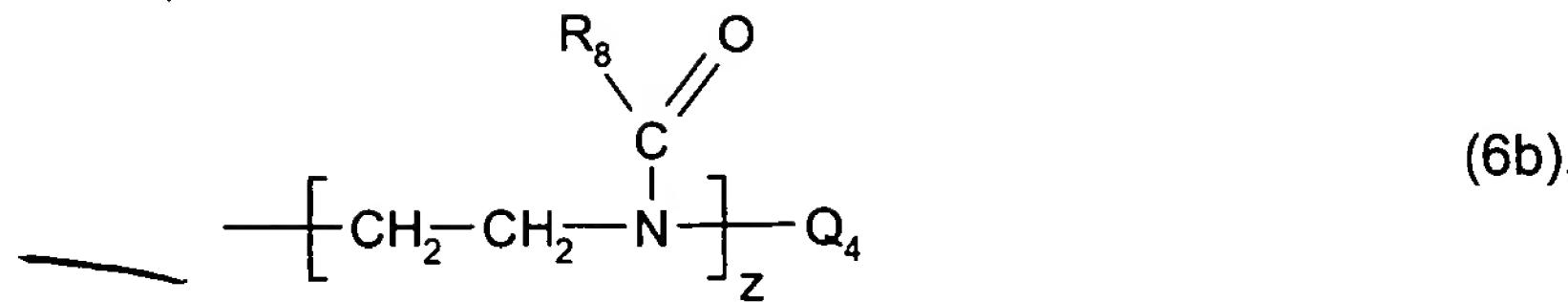
B2

9. (once amended) An amphiphilic block copolymer according to claim 1, wherein Q is a polyoxyalkylene, poly(vinylpyrrolidone), poly(hydroxyethylacrylate), poly(hydroxyethylmethacrylate), polyacrylamide, poly(N,N-dimethylacrylamide), polyacrylic acid, polymethacrylic acid, polyacyl alkylene imine or a copolymeric mixture of two or more of the above-mentioned polymers which in each case comprises one or more ethylenically unsaturated bond and has a weight average molecular weight of ≥ 100 .

B3

10. (once amended) An amphiphilic block copolymer according to claim 9, wherein Q is a hydrophilic segment of formula



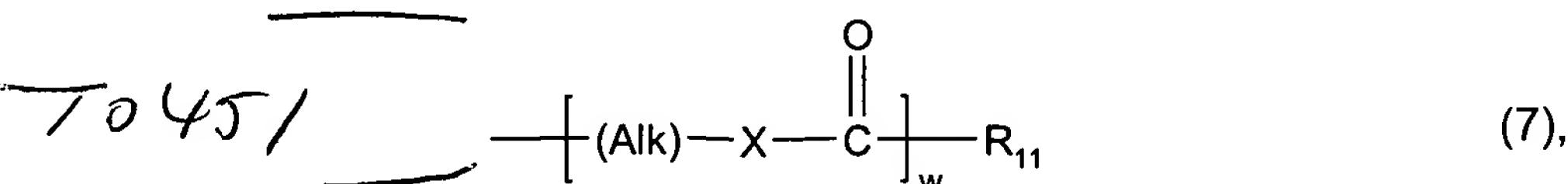
TO 450

wherein L_1' is a bivalent linking group of formula

- $\text{X}_1 - \text{C}(\text{O}) - \text{NH} - \text{R}_{10} - \text{NH} - \text{C}(\text{O}) - \text{X}_2 -$ (4a),
- $\text{X}_1 - \text{C}(\text{O}) - \text{R}_{10} - \text{C}(\text{O}) - \text{X}_2 -$ (4b),
- $\text{X}_1 - \text{C}(\text{O}) -$ (4c),
- $\text{C}(\text{O}) - \text{X}_2 -$ (4d), or
- $\text{X}_1 - \text{C}(\text{O}) - \text{X}_2 -$ (4e),

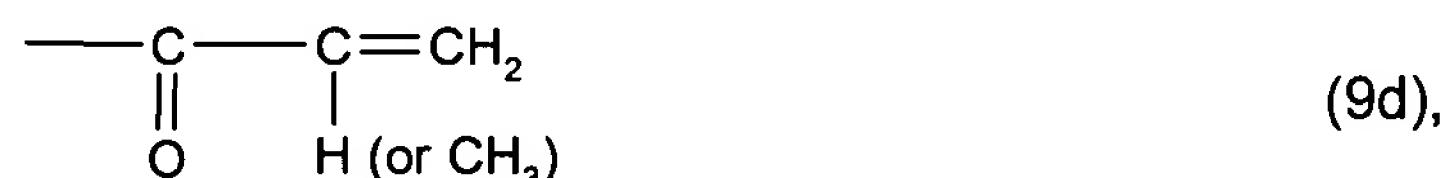
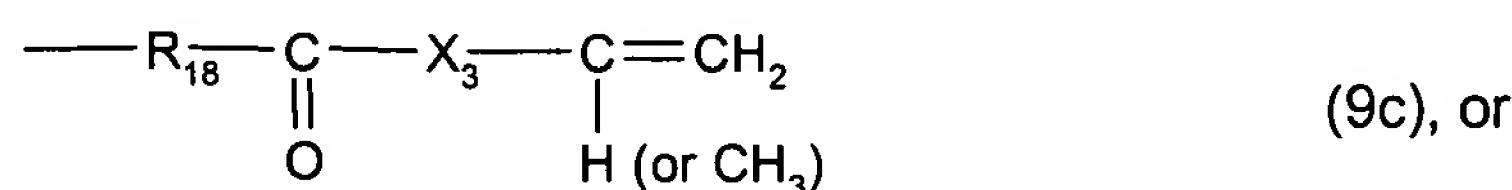
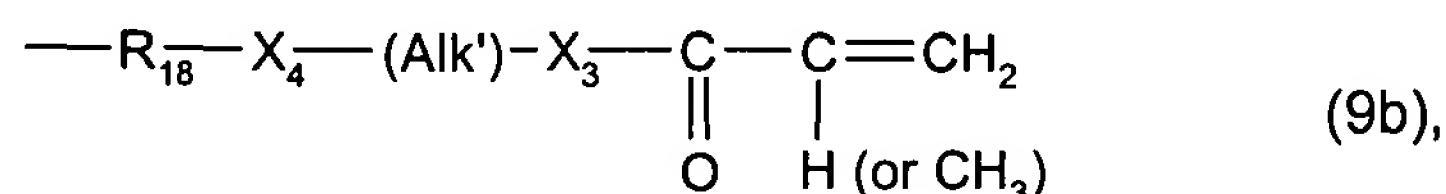
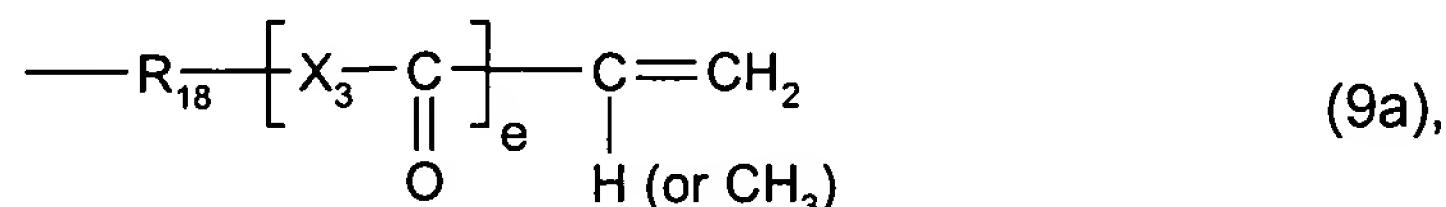
wherein X_1 and X_2 are each independently of the other a group -O-, -S- or -NR₀-, R₀ is hydrogen or C₁-C₄-alkyl, and R₁₀ is linear or branched C₁-C₁₈-alkylene or unsubstituted or C₁-C₄-alkyl- or C₁-C₄-alkoxy-substituted C₆-C₁₀-arylene, C₇-C₁₈-aralkylene, C₆-C₁₀-arylene-C₁-C₂-alkylene-C₆-C₁₀-arylene, C₃-C₈-cycloalkylene, C₃-C₈-cycloalkylene-C₁-C₆-alkylene, C₃-C₈-cycloalkylene-C₁-C₂-alkylene-C₃-C₈-cycloalkylene or C₁-C₆-alkylene-C₃-C₈-cycloalkylene-C₁-C₆-alkylene,

Q₂ is a radical of formula



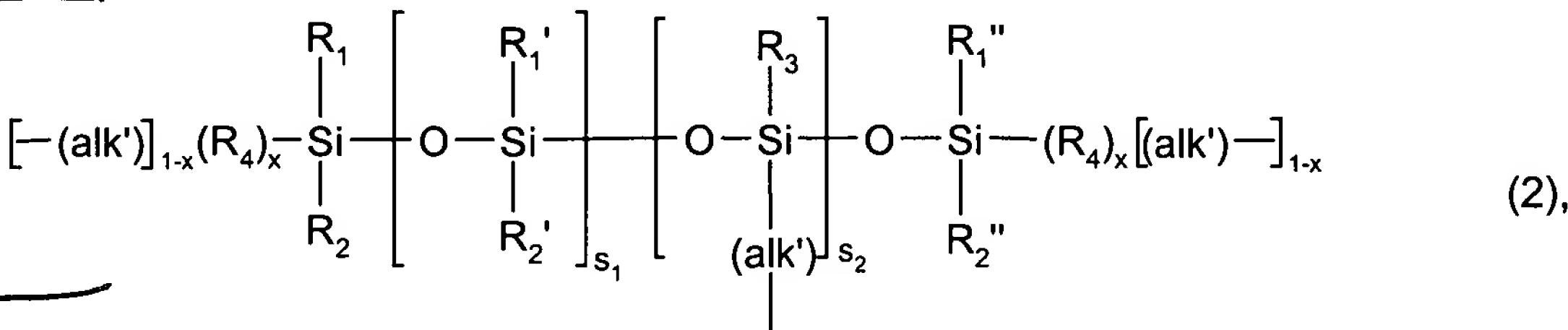
wherein (Alk) is linear or branched C₁-C₁₂-alkylene, X is -O- or -NH-, R₁₁ is an olefinically unsaturated copolymerisable radical having from 2 to 24 carbon atoms which is unsubstituted or further substituted by C₁-C₄alkoxy, halogen, phenyl or carboxy, and w is the number 0 or 1, Q₃ is C₃-C₁₂-alkenyl or a radical -(CH₂)₁₋₄-O-R₁₆ wherein R₁₆ is acryloyl, methacryloyl or a group -C(O)-NH-(CH₂)₂₋₄-O-C(O)-C(R₁₇)=CH₂ and R₁₇ is hydrogen or methyl,

Q₄ is a radical of formula

TO 452B

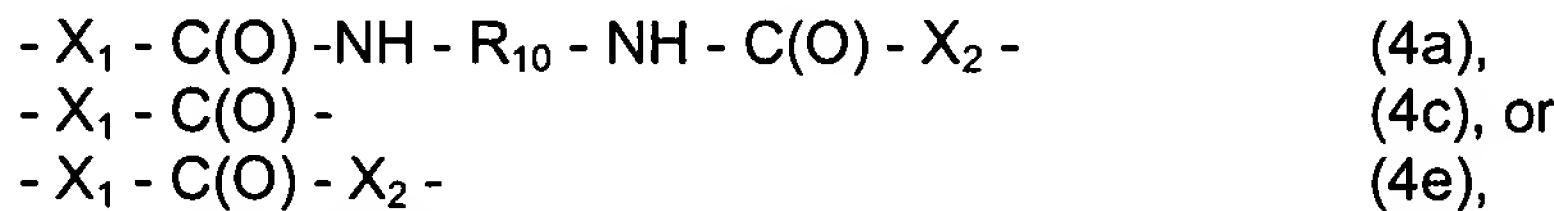
wherein X_3 is $-O-$ or $-NR-$, R is hydrogen or C_1-C_4 -alkyl, X_4 is a group $-C(O)-O-$, $-O-C(O)-NH-$ or $-NH-C(O)-O-$, (Alk') is C_1-C_8 -alkylene, e is an integer of 0 or 1, and R_{18} is C_1-C_{12} -alkylene, phenylene or C_7-C_{12} -phenylenealkylene,
 one of the radicals R_6 and R_7 is hydrogen and the other is methyl,
 (alk'') is C_1-C_6 -alkylene, c is the number 0 or 1, and each of a and b independently of the other is a number from 0 to 100, the sum of $(a+b)$ being from 2 to 100,
 R_8 is hydrogen; C_1-C_{12} -alkyl unsubstituted or substituted by hydroxy or fluoro and/or uninterrupted or interrupted by oxygen; C_5-C_8 -cycloalkyl; phenyl; or benzyl,
 R_9 is C_1-C_{12} -alkyl, benzyl, C_2-C_4 -alkanoyl, benzoyl or phenyl, and
 z is an integer from 2 to 150.

11. (once amended) An amphiphilic block copolymer according to claim 2 of formula (1a), wherein A is a polysiloxane segment of formula

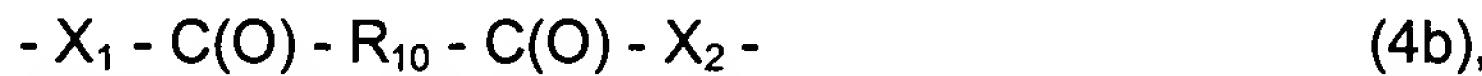


wherein x and s_2 are each 0, and R_1 , R_1' , R_1'' , R_2 , R_2' , R_2'' , R_3 and R_4 are each independently of one another C_1-C_4 -alkyl, B is a polyoxyalkylene, poly(vinylpyrrolidone), poly(hydroxyethylacrylate), poly(hydroxyethylmethacrylate), polyacrylamide, poly(N,N -dimethylacrylamide), polyacrylic acid, polymethacrylic acid, polyacetyl alkylene imine or a copolymeric mixture of two or more of the above-mentioned polymers,

L_1 is a linking group of formula



L_2 is a linking group of the above formula (4a), and L_3 is a linking group of the above formula (4c) or of the formula



wherein X_1 and X_2 are each independently of the other a group $-O-$, $-S-$ or $-NR_0-$, R_0 is hydrogen or C_1-C_4 -alkyl, and R_{10} is linear or branched C_1-C_{18} -alkylene or unsubstituted or C_1-C_4 -alkyl- or C_1-C_4 -alkoxy-substituted C_6-C_{10} -arylene, C_7-C_{18} -aralkylene, C_6-C_{10} -arylene- C_1-C_2 -alkylene- C_6-C_{10} -arylene, C_3-C_8 -cycloalkylene, C_3-C_8 -cycloalkylene- C_1-C_6 -alkylene, C_3-C_8 -cycloalkylene- C_1-C_2 -alkylene- C_3-C_8 -cycloalkylene or C_1-C_6 -alkylene- C_3-C_8 -cycloalkylene- C_1-C_6 -alkylene,

Q is a radical Q_1 of formula